

ABSTRACT OF THE DISCLOSURE

A method of manufacturing potassium niobate single crystal thin film on a single crystal substrate that epitaxially grows orthorhombic potassium niobate single crystal at a temperature near room temperature at a high deposition rate. A surface acoustic wave element, frequency filter, frequency oscillator, electronics circuit, and electronic device employ the thin film manufactured by the method, and are high in k^2 , wideband, downsized, and economical in power consumption. The method includes the steps of coating liquid drops of a potassium niobate solution on a SrTiO_3 single crystal substrate by a liquid drop emission method, and precipitating potassium niobate single crystal layer by epitaxial growth from the liquid drops.